


IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~striketrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please CANCEL claims 3, 4, 11, 12, 19 and 20 AMEND claims 1, 2, 5-9, 13, 17 AND 21 and ADD new claim 25 in accordance with the following:

1. (CURRENTLY AMENDED) A computer readable recording medium ~~recorded with storing~~ a diagnosis supporting program for ~~realizing on a computer~~ controlling a computer, said program comprising:

 ~~a lesion position detecting function for detecting a lesion position from a diagnosis target image;~~

~~a feature quantity extracting function for extracting image-wise feature quantities of the lesion position detected by said lesion position detecting function; and~~

~~a reference image retrieving function for retrieving reference images which are image-wise similar to the diagnosis target image out of a database stored with reference images and feature quantities of reference images, based on the feature quantities extracted by said feature quantity extracting function; and~~

calculating image-wise similarities between each of the reference images stored in the database and the diagnosis target image, respectively, by matching the feature quantities of each of the reference images stored in the database with the feature quantities of the diagnosis target image,

wherein said retrieving retrieves reference images in order of similarity as calculated by said calculating, and

wherein said calculating calculates similarities, taking into account a weighting set for each organ.

2. (CURRENTLY AMENDED) A computer readable recording medium ~~recorded with a diagnosis supporting program of~~ according to claim 1, further comprising:

~~a database registering function for registering said the diagnosis target image and the~~

feature quantities thereof into said the database.

3. (CANCELLED)

4. (CANCELLED)

5. (CURRENTLY AMENDED) A computer readable recording medium ~~recorded with a diagnosis supporting program of~~ according to claim 41,
wherein said weighting is set in a variably constituted table.

6. (CURRENTLY AMENDED) A computer readable recording medium ~~recorded with a diagnosis supporting program of~~ according to claim 1, further comprising:
a ~~finding displaying function for displaying findings related to the reference images~~
retrieved by said ~~reference image retrieving function~~.

7. (CURRENTLY AMENDED) A computer readable recording medium ~~recorded with a diagnosis supporting program of~~ according to claim 1,
wherein said ~~lesion position detecting function~~ detects a lesion position of a designated organ.

8. (CURRENTLY AMENDED) A computer readable recording medium ~~recorded with a diagnosis supporting program of~~ according to claim 1,
wherein said ~~feature quantity extracting function~~ extracts a global feature quantity, a topical feature quantity and a common feature quantity, for every lesion position of the diagnosis target image.

9. (CURRENTLY AMENDED) A diagnosis supporting apparatus comprising:
a ~~lesion position detecting means for detecting a lesion position from a diagnosis target image;~~

a ~~feature quantity extracting means for extracting image-wise feature quantities of the lesion position detected by said lesion position detecting means; and~~

a ~~reference image retrieving means for retrieving reference images which are image-wise similar to the diagnosis target image out of a database stored with reference images and feature quantities of reference images, based on the feature quantities extracted by said feature quantity~~

extracting means; and

similarity calculating means for calculating image-wise similarities between each of the reference images stored in said database and the diagnosis target image, respectively, by matching the feature quantities of each of the reference images stored in said database with the feature quantities of the diagnosis target image,

wherein said reference image retrieving means retrieves reference images in order of similarity as calculated by said similarity calculating means, and

wherein said similarity calculating means calculates similarities, taking into account a weighting set for each organ.

10. (CURRENTLY AMENDED) A diagnosis supporting apparatus of claim 9, further comprising:

~~a~~-database registering means for registering said diagnosis target image and feature quantities thereof into said database.

11. (CANCELLED)

12. (CANCELLED)

13. (CURRENTLY AMENDED) A diagnosis supporting apparatus of claim 429, wherein said weighting is set in a variably constituted table.

14. (CURRENTLY AMENDED) A diagnosis supporting apparatus of claim 9, further comprising:

~~a~~-finding displaying means for displaying findings related to the reference images retrieved by said reference image retrieving means.

15. (ORIGINAL) A diagnosis supporting apparatus of claim 9, wherein said lesion position detecting means detects a lesion position of a designated organ.

16. (ORIGINAL) A diagnosis supporting apparatus of claim 9, wherein said feature quantity extracting means extracts a global feature quantity, a topical feature quantity and a common feature quantity, for every lesion position of the diagnosis

target image.

17. (CURRENTLY AMENDED) A diagnosis supporting method comprising:

a lesion position detecting process for detecting a lesion position from a diagnosis target image;

a feature quantity extracting process for extracting image-wise feature quantities of the lesion position detected by said lesion position detecting process; and

a reference image retrieving process for retrieving reference images which are image-wise similar to the diagnosis target image out of a database stored with reference images and feature quantities of reference images, based on the feature quantities extracted by said feature quantity extracting process; and

a similarity calculating process for calculating image-wise similarities between each of the reference images stored in said database and the diagnosis target image, respectively, by matching the feature quantities of each of the reference images stored in said database with the feature quantities of the diagnosis target image.

wherein said reference image retrieving process retrieves reference images in order of similarity as calculated by said similarity calculating process, and

wherein said similarity calculating process calculates similarities, taking into account a weighting set for each organ.

18. (ORIGINAL) A diagnosis supporting method of claim 17, further comprising:

a database registering process for registering said diagnosis target image and feature quantities thereof into said database.

19. (CANCELLED)

20. (CANCELLED)

21. (CURRENTLY AMENDED) A diagnosis supporting method of claim ~~20~~17,

wherein said weighting is set in a variably constituted table.

22. (ORIGINAL) A diagnosis supporting method of claim 17, further comprising:

a finding displaying process for displaying findings related to the reference images retrieved by said reference image retrieving process.

23. (ORIGINAL) A diagnosis supporting method of claim 17, wherein said lesion position detecting process detects a lesion position of a designated organ.

24. (ORIGINAL) A diagnosis supporting method of claim 17, wherein said feature quantity extracting process extracts a global feature quantity, a topical feature quantity and a common feature quantity, for every lesion position of the diagnosis target image.

Qi 25. (NEW) The diagnosis supporting method comprising:
detecting a lesion position from a target image;
extracting image-wise feature quantities of the detected lesion position;
retrieving reference images which are image-wise similar to a target image out of a database storing reference images and feature quantities of reference images, based on the extracted feature quantities; and
calculating image-wise similarities between each of the reference images and the target image by matching the feature quantities of each of the reference images with the feature quantities of the target image, wherein the reference images are retrieved in order of similarity as calculated by said calculating image-wise similarities, and wherein said calculating comprises calculating similarities, taking into account a weighting set for each organ.
